

DETAILED ACTION

Allowable Subject Matter

1. Claims 16-30 are allowed.
2. The following is an examiner's statement of reasons for allowance: The prior art neither anticipates nor renders obvious the combination of limitations found in independent claim 16, which specifically claims an object of value comprising: i) a carrier; ii) an optical security element disposed on the carrier layer having a first layer containing a moire pattern; and iii) two or more secondary layers containing moire analyzers operating with the first layer's moire pattern, a first secondary layer being arranged on the same side of the carrier layer as the first layer and a second secondary layer being arranged on the opposite side of the carrier layer in such a manner that a different moire images are visible in transmitted and incident light, wherein a pattern formed by repeating structures acts as the moiré analyzer.
3. The closest prior art is U.S. Patent Application Publication No. 2002/0027361 to Hardwick et al. ("Hardwick"), which generally discloses a security document comprising various security devices including moiré patterns and diffractive gratings. One might argue that Hardwick implicitly discloses Applicant's general invention, given that both Maurer and Applicant's claimed invention are directed to security documents containing security devices disposed thereon, including said moiré patterns and diffractive gratings.
4. However, Hardwick fails to specifically disclose: i) a moiré pattern being printed on another security device; ii) the diffractive gratings being specifically constructed to function as analyzers of the Moire patterns with which they cooperate; iii) the specific

Art Unit: 3725

arrangement of layers that Applicant claims, said arrangement being such that it allows for the formation of a first moire image when viewed in transmitted light and a second moire image when viewed in incident light; and iv) the diffractive grating having a pattern formed by repeating structures thus functioning as the moire analyzer, as claimed by Applicant.

5. Examiner is aware of U.S. Patent No. 4,892,336 to Kaule et al. ("Kaule"), U.S. Patent Application Publication No. 2003/0003323 to Murakami et al. ("Murakami"), U.S. Patent No. 5,712,731 to Drinkwater et al. ("Drinkwater"), and U.S. Patent Application Publication No. 2003/0137145 to Fell et al. ("Fell"). Kaule teaches the concept of providing a partially shaped thin film layer which produces a color change effect in a security document, but fails to specifically do so in combination with a moiré pattern such as that which Applicant claims. Murakami teaches the concept of providing a printable substance ultraviolet or infrared color pigments in a security document, but fails to specifically be designed to interact with a Moire analyzer formed in the manner claimed by Applicant. Drinkwater teaches the concept of providing a transfer layer to a security device, but fails to have distinguishable effects in transmitted versus incident light settings. Fell teaches the concept of providing a moiré analyzer on a security document which is so designed that a moiré image is generated when the moiré analyzer is brought into overlapping relationship with a folded underlying layer, but fails to do so set in a series configuration atop one another, in the manner of Applicant's invention.

Art Unit: 3725

6. With regard to the remaining limitations that Hardwick fails to specifically disclose, the prior art fails to teach said remaining limitations, along with proper teaching, suggestion or motivation for making requisite combinations to achieve Applicant's claimed invention's claimed structure and effect without the use of improper hindsight. Furthermore, the number of additional references and the manner in which said references would be required to be modified would be strongly indicative of the use of improper hindsight.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUSTIN V. LEWIS whose telephone number is (571)270-5052. The examiner can normally be reached on M-F 7:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dana Ross can be reached on (571) 272-4480. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3725

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dana Ross/

Supervisory Patent Examiner, Art Unit 3725

/JVL/